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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re New Patent Application of )  
Masuo KONDO, et al. )  
International Application No. PCT/JP03/012183 ) Attn: Designated/Elected  
International Date: September 24, 2003 ) Office  
For: SOLDER BALL, METHOD OF MAKING THE )  
SAME, AND METHOD OF MAKING )  
SEMICONDUCTOR INTERCONNECT )  
STRUCTURE ) Date: March 24, 2005

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. §1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98. In accordance with the PTO notice dated July 11, 2003, waiving the requirement under 37 CFR 1.98 (a)(2)(i) for submitting copies of each cited U.S. Patent, for all U.S. national patent applications filed after June 30, 2003, no copies of U.S. Patents are enclosed. However, copies of foreign patents and non-patent literature are submitted under 37 CFR 1.98(a)(2).

**Japanese Patent Application Laid-Open No. 2002-57177 is in the same family as U.S. Patent 2002/0051728.**

**Japanese Patent Application Laid-Open No. 2001-150183 is in the same family as U.S. Patent 2002/0046627.**

**Japanese Patent Application Laid-Open No. 2000-34593 is in the same family as U.S. Patent 6,183,545.**

**Japanese Laid-Open Patent Publication No. 2000-34593 is referred to on page 23 line 6, of the specification.**

**Japanese Laid-Open Patent Publication No. 10-270836 is referred to on page 3 line 14, of the specification.**

**Japanese Laid-Open Patent Publication No. 8-13185 is referred to on page 23 line 6, of the specification.**

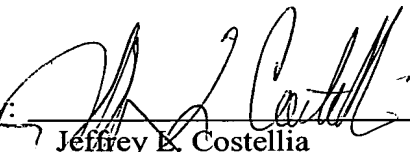
**Japanese Laid-Open Patent Publication No. 10-36995 is referred to on page 23 line 9, of the specification.**

**Katsuaki SUGANUMA, "Lead-free Soldering Technology-Trump of Environmentally Friendly Mounting", Kogyo Chosakai Publishing Inc., January 20, 2001 is referred to on page 41 line 18, of the specification.**

**Nawafune et al., "Sn-Ag Alloy Electrodeposition from L-Tartrate Complex Bath" Surface Technology Vol. 49, No. 7, 1998 is referred to on page 23 line 11 of the specification.**

It is requested that the accompanying PTO-1449 be considered and made of record in the above-identified application. To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

Respectfully submitted,

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Substitute for form 1449A/PTO				Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				Application Number	10/529172
				Filing Date	March 24, 2005
				First Named Inventor	Masuo KONDO, et al.
				Art Unit	
				Examiner Name	
Sheet		of		Attorney Docket Number	743421-82

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
		US-2002/0051728 A1	05/02/2002	Sato et al.	
		US-2002/0046627 A1	04/25/2002	Amita et al.	
		US-6,183,545 B1	02/06/2001	Okuhama et al.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>o</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		JP	2000-34593	02/02/2000			
		JP	2001-150183	06/05/2001			
		JP	2002-57177	02/22/2002			
		JP	2002-239780	08/28/2002	Masamoto Tanaka et al.		Abstract
		JP	2001-332641	11/30/2001	Hideo Arima et al.		Abstract
		JP	10-270836	10/09/1998	Masako Ikegami et al.		Abstract
		JP	08-013185	01/16/1996	Kanji Ono et al.		Abstract
		JP	10-036995	02/10/1998	Keigo Obata et al.		Abstract

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		Katsuaki SUGANUMA, "Lead-free Soldering Technology—Trump of Environmentally Friendly Mounting", Kogyo Chosakai Publishing Inc., January 20, 2001.	
		Kohara et al., "Application of Sn and Ag Multi Plated Cu Core Pb Free Solder Ball to BGA Package", 7 <sup>th</sup> Symposium on "Microjoining and Assembly Technology in Electronics", pp 119-124, February 1-2, 2001.	
		Nawafune et al., "Sn-Ag Alloy Electrodeposition from L-Tartrate Complex Bath", Surface Technology Vol. 49, No.7, pp. 759-763, 1998.	

Examiner Signature	Date Considered
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